

Comparisons of Job Characteristics

Focus Occupation: Security and Fire Alarm Systems Installers (49-2098)

Associated Occupation: Electricians (47-2111)

Compare Knowledge

Compare Skills

Compare Abilities

Compare Detailed Work Activities

Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 72

Focus Occupation: Security and Fire Alarm Systems Installers (49-2098)

Associated Occupation: Electricians (47-2111)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Mechanical	6.8	16.5	9.8	<<	Extensive education and/or training may be required
Building and Construction	4.0	14.6	9.3	<<	Extensive education and/or training may be required
Mathematics	9.2	14.5	6.2	<<	Extensive education and/or training may be required
Design	5.2	13.4	6.6	<<	Extensive education and/or training may be required
Administration and Management	8.4	12.2	6.8	<<	Extensive education and/or training may be required
Engineering and Technology	5.7	11.8	6.6	<<	Extensive education and/or training may be required
Physics	4.3	10.9	3.2	<<	Extensive education and/or training may be required
Telecommunications	3.9	10.4	9.1	<	Expanded education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 70

Focus Occupation: Security and Fire Alarm Systems Installers (49-2098)

Associated Occupation: Electricians (47-2111)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Troubleshooting	4.5	12.3	8.2	<<	Extensive development of skills in this area may be required

Repairing	3.4	11.6	7.6	<<	Extensive development of skills in this area may be required
Quality Control Analysis	5.9	11.0	8.7	<	A higher skill level may be required
Equipment Maintenance	3.5	10.3	7.6	<<	Extensive development of skills in this area may be required
Installation	1.7	9.4	8.7	0	Current skill level may be sufficient
Equipment Selection	3.3	8.4	5.2	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 91			
Focus Occupation: Security and Fire Alarm Systems Installers (49-2098) Associated Occupation: Electricians (47-2111)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Visual Color Discrimination	6.4	12.8	9.5	<<	Extensive improvement in abilities may be required
Visualization	7.5	12.2	9.0	<<	Extensive improvement in abilities may be required
Finger Dexterity	7.6	11.8	8.4	<<	Extensive improvement in abilities may be required
Extent Flexibility	4.8	10.4	7.8	<<	Extensive improvement in abilities may be required
Gross Body Equilibrium	3.2	8.2	5.5	<<	Extensive improvement in abilities may be required
Speed of Limb Movement	3.2	6.6	3.3	<<	Extensive improvement in abilities may be required
Glare Sensitivity	2.6	5.9	3.1	<<	Extensive improvement in abilities may be required
Sound Localization	2.2	5.3	3.2	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 98
Focus Occupation: Security and Fire Alarm Systems Installers (49-2098) Associated Occupation: Electricians (47-2111)		
Work Activities	Exclusivity of Activity	
Analyze operation of malfunctioning electrical or electronic equipment	68	
Bend tubing or conduit	81	
Distinguish colors	44	
Estimate cost for repair services	82	

Inspect electrical installation for code conformance	89
Install electrical conduit or tubing	81
Install electrical fixtures or components	71
Install electronic power, communication, control, or security equipment or systems	76
Install or replace meters, regulators, or related measuring or control devices	66
Install/connect electrical equipment to power circuit	57
Install/string electrical or electronic cable or wiring	76
Perform safety inspections in industrial, manufacturing or repair setting	32
Read blueprints	10
Read tape measure	41
Read technical drawings	7
Repair electronic components, equipment, or systems	74
Repair or adjust measuring or control devices	71
Repair or replace electrical wiring, circuits, fixtures, or equipment	49
Replace electronic components	63
Solder electrical or electronic connections or components	55
Splice electric cable	85
Test electrical/electronic wiring, equipment, systems or fixtures	54
Test electronic or electrical circuit connections	66
Understand service or repair manuals	40
Use electrical or electronic test devices or equipment	40
Use hand or power tools	2
Use interpersonal communication techniques	10
Use soldering equipment	44
Use voltmeter, ammeter, or ohmmeter	52

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 81

Focus Occupation: Security and Fire Alarm Systems Installers (49-2098)

Associated Occupation: Electricians (47-2111)

Tools and Technologies	Exclusivity
Aerial lifts	13
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Electrical measuring and testing equipment	7
Fastener setting tools	12
Forming tools	2
Holding and clamping tools	3
Indicating and recording instruments	2
Ladders and scaffolding	6
Light and wave generating and measuring equipment	4

Measuring and layout tools	3
Power tools	2
Pulling tools	31
Soldering and brazing and welding machinery and supplies	6
Surveillance and detection equipment	11
Tool attachments and accessories	12
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.